DEFENSE INFORMATION SYSTEMS AGENCY
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MEMORANDUM FOR DISTRIBUTION

SUBJECT: Extension of the Special Interoperability Test Certification of Vidyo Video
             Conferencing System from Software Version 2.1.1.11_D to Software Version
             2.1.2.56_D with Codian Media Service Engine (MSE) 8321 Integrated Services
             Digital Network (ISDN) Gateway version 2.1(1.43)P

References: (a) DoD Directive 4630.05, "Interoperability and Supportability of Information
                  Technology (IT) and National Security Systems (NSS)," 5 May 2004
             (b) CJCSI 6212.01E, "Interoperability and Supportability of Information
                  Technology and National Security Systems," 15 December 2008
             (c) through (g), see Enclosure

1. References (a) and (b) establish the Defense Information Systems Agency (DISA), Joint
Interoperability Test Command (JITC), as the responsible organization for interoperability test
certification.

2. The Vidyo Video Conferencing System with Software Version 2.1.1.11_D with Codian MSE
8321 ISDN Gateway version 2.1(1.43)P is hereinafter referred to as the System Under Test
(SUT). The SUT meets all of its critical interface and functional interoperability requirements
and is certified for joint use within the Defense Information System Network (DISN) as a Video
Teleconferencing (VTC) system. The SUT met the conditional requirements for an Internet
Protocol (IP) interface with the International Telecommunication Union – Telecommunication
Standardization Sector (ITU-T) H.323 protocol; however, Assured Service is not yet defined for
an IP interface with ITU-T H.323 protocol. Therefore, Command and Control (C2) VTC users
and Special C2 VTC users are not authorized to be served by an IP interface with the ITU-T
H.323 protocol.

The SUT is IP only and requires the use of an ITU-T H.323 to ITU-T H.320 gateway solution as
a required subcomponent in order to connect to the DISN. In testing, JITC found minimal risk in
certifying this with any ITU-T H.323 to ITU-T H.320 gateways that are certified and on the
Unified Capabilities (UC) Approved Product List (APL) as a component to other certified VTC
systems. The SUT meets the critical interoperability requirements set forth in Reference (c)
using test procedures derived from Reference (d). No other configurations, features, or
functions, except those cited within this report, are certified by the JITC. This certification
expires upon changes that could affect interoperability, but no later than three years from the date
the DISA Certifying Authority (CA) provided a positive Recommendation.

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3. The extension of this certification is based upon Desktop Review (DTR) 1. The original certification, documented in Reference (e), is based on interoperability testing conducted by JITC, review of the vendor's Letters of Compliance (LoC), DISA adjudication of open test discrepancy reports (TDRs), and DISA CA Recommendation. Interoperability testing was conducted by JITC at the Global Information Grid Network Test Facility, Fort Huachuca, Arizona, from 20 June through 29 July 2011 to test the SUT with software release 2.1.0.15_D. The Verification and Validation testing was conducted from 19 through 23 December 2011 to test the SUT with Software Release 2.1.1.11_D which included IPv6 capability and some IA fixes. Review of the vendor's LoC was completed on 27 September 2011. DISA adjudication of outstanding TDRs was completed on 18 March 2012 and included a lessened requirement from Reference (f). The DISA CA provided a positive recommendation on 25 April 2012 based on the security testing completed by DISA-led IA test teams and published in a separate report, Reference (g). This DTR was requested to update the SUT software release from Version 2.1.1.11_D to 2.1.2.56_D to fix open IA discrepancies. This DTR also includes another gateway in the solution to provide IPv6 dual stack capability. JITC conducted V&V testing from 27 through 31 August 2012. DISA adjudication of outstanding TDRs was completed on 23 October 2012. The DISA CA approved the new configuration on 26 September 2012, based on review of the DISA-led IA test team's updated report, Reference (g).

4. The SUT tested VTC systems are depicted in Table 1. The Functional Requirements (FR) used to evaluate the interoperability of the SUT, certified interfaces and the interoperability statuses are indicated in Table 2.

Table 1. SUT VTC Systems

	Tested VTC System	Supported Interfaces
SUT[1,2] Version 2.1.2	Vidyo Room Systems HD050, HD100, HD220 with Software Version 2.1.0.361_D	IP (10/100/1000 Mbps with ITU-T H.323 protocol)
	Vidyo Desktop Software With Software Version 2.1.0.383_D	IP (10/100 Mbps with ITU-T H.323 protocol)
	Vidyo Portal and Vidyo Router With Software Version 2.1.2.56_D	IP (10/100 Mbps with ITU-T H.323 protocol)
	Vidyo Gateway With Software Version 2.1.12.21_D	IP (10/100 Mbps with ITU-T H.323 protocol)
	Codian MSE 8321 ISDN Gateway Software Version 2.1(1.43)P	IP (10/100 Mbps with ITU-T H.323 protocol), ISDN PRI T1

NOTES:
1. The SUT is IP only and requires the use of an ITU-T H.323 to ITU-T H.320 gateway solution as a required subcomponent in order to connect to the DISN. In testing, JITC has found minimal risk in certifying this with any ITU-T H.323 to ITU-T H.320 gateway certified and on the UC APL as a component to other certified VTC systems.
2. The SUT met the conditional requirements for an IP interface with the ITU-T H.323 protocol; however, Assured Service is not yet defined for an IP interface with ITU-T H.323 protocol. Therefore, C2 VTC users and Special C2 VTC users are not authorized to be served by an IP interface with the ITU-T H.323 protocol.

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Table 1. SUT VTC Systems (continued)

LEGEND:

APL	Approved Products List	JITC	Joint Interoperability Test Command
C2	Command and Control	Mbps	Megabits per second
DISN	Defense Information System Network	MSE	Media Service Engine
H.320	Standard for narrowband VTC	PRI	Primary Rate Interface
H.323	Standard for multi-media communications on packet-based networks	SUT	System Under Test
		T1	Digital Transmission Link Level 1 (1.544 Mbps)
HD	High Definition	UC	Unified Capabilities
IP	Internet Protocol	VTC	Video Teleconferencing
ISDN	Integrated Services Digital Network		
ITU-T	International Telecommunication Union - Telecommunication Standardization Sector		

Table 2. SUT FRs and Interoperability Status

Interface	Critical	Certified	Requirements Required or Conditional	Status	UCR Reference
IP (10/100/1000 Mbps) ITU-T H.323	No[1]	Yes[2]	The VTC system/endpoints shall meet the requirements of FTR 1080B-2002. (R)	Met	5.2.4.2
			ITU-T H.323 in accordance with FTR 1080B-2002. (C)	Met[3]	5.2.4.2
			Layer 3 Differential Service Code Point tagging as specified in the UCR, Section 5.3.1. (C)	Not Met[4]	5.2.4.2
			A loss of any conferee on a multipoint videoconference shall not terminate or degrade the DSN service supporting VTC connections of any of the other conferees on the videoconference. (R)	Met	5.2.4.2
			Audio add-on interface, implemented independently of an IAS, shall be in accordance with the UCR, Section 5.2.3. (C)	Met	5.2.4.2
			Physical, electrical, and software characteristics shall not degrade or impair switch and associated network operations. (R)	Met	5.2.4.2
			VTC IP interface must be IPv6 capable and meet the Simple Server/Network Appliance IPv6 profile (R)	Partially Met[5]	5.3.5
ISDN PRI T1	No[1]	Yes	The VTC system/endpoints shall meet the requirements of FTR 1080B-2002. (R)	Met[3]	5.2.4.2
			A loss of any conferee on a multipoint videoconference shall not terminate or degrade the DSN service supporting VTC connections of any of the other conferees on the videoconference. (R)	Met	5.2.4.2
			Audio add-on interface, implemented independently of an IAS, shall be in accordance with the UCR, Section 5.2.3. (C)	Met	5.2.4.2
			Integrated PRI interface shall be in conformance with IAS requirements in the UCR, Section 5.2.6. (C)	Met	5.2.4.2
			Physical, electrical, and software characteristics shall not degrade or impair switch and associated network operations. (R)	Met	5.2.4.2
Security	Yes	Yes	GR-815 and STIGs (R)	Met[6]	4.3.1 and 5.4.6.1

NOTES:
1. The SUT is IP only and requires the use of an ITU-T H.323 to ITU-T H.320 gateway solution as a required subcomponent in order to connect to the DISN. In testing, JITC has found minimal risk in certifying this with any ITU-T H.323 to ITU-T H.320 gateways certified and on the UC APL as a component to other certified VTC systems.
2. The SUT met the conditional requirements for an IP interface with the ITU-T H.323 protocol; however, Assured Service is not yet defined for an IP interface with ITU-T H.323 protocol. Therefore, C2 VTC users and Special C2 VTC users are not authorized to be served by an IP interface with the ITU-T H.323 protocol.
3. All requirements are derived from UCR 2008, Change 1, Reference (c). The SUT does not support a sub-requirement inside FTR-1080B-2002. This sub-requirement was changed to conditional in UCR 2008, Change 3, Reference (f). DISA stated that effective immediately, this is no longer applicable to the SUT.

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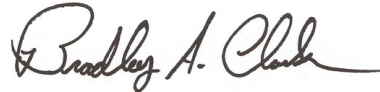**Table 2. SUT FRs and Interoperability Status (continued)**

NOTES (continued):
4. The SUT does not support DSCP tagging for IPv4 to IPv6 traffic. All traffic is tagged at 0 (Best Effort). DISA has accepted and approved the vendor's POA&M and adjudicated this discrepancy as having a minor operational impact. Additionally, DISA stipulated that this discrepancy must be fixed and verified by the POA&M date or it will be pulled off the UC APL.
5. The SUT does not support Dual Stack IPv6. The SUT can be configured for IPv4 or IPv6. DISA adjudicated this discrepancy as minor because the SUT can include a second identical gateway to meet the dual-stack requirements.
6. Security is tested by DISA-led Information Assurance test teams and published in a separate report, Reference (g).

LEGEND:

APL	Approved Products List	IPv4	Internet Protocol version 4
C	Conditional	IPv6	Internet Protocol version 6
C2	Command and Control	ISDN	Integrated Services Digital Network
DISA	Defense Information Systems Agency	ITU-T	International Telecommunication Union –
DISN	Defense Information System Network		Telecommunication Standardization Sector
DSCP	Differentiated Services Code Point	JITC	Joint Interoperability Test Command
DSN	Defense Switched Network	Mbps	Megabits per seconds
FRs	Functional Requirements	PRI	Primary Rate Interface
FTR	Federal Telecommunications Recommendation	POA&M	Plan of Action and Milestones
GR	Generic Requirement	R	Required
GR-815	Generic Requirements For Network	STIGs	Security Technical Implementation Guides
	Element/Network System (NE/NS) Security	SUT	System Under Test
H.320	Standard for narrowband VTC	T1	Digital Transmission Link Level 1 (1.544 Mbps)
H.323	Standard for multi-media communications on	UC	Unified Capabilities
	packet-based networks	UCR	Unified Capabilities Requirements
IAS	Integrated Access Switch	VTC	Video Teleconferencing
IP	Internet Protocol		

5. No detailed test report was developed in accordance with the Program Manager's request. JITC distributes interoperability information via the JITC Electronic Report Distribution (ERD) system, which uses Unclassified-But-Sensitive Internet Protocol Router Network (NIPRNet) e-mail. More comprehensive interoperability status information is available via the JITC System Tracking Program (STP). The STP is accessible by .mil/gov users on the NIPRNet at https://stp.fhu.disa.mil. Test reports, lessons learned, and related testing documents and references are on the JITC Joint Interoperability Tool (JIT) at http://jit.fhu.disa.mil (NIPRNet). Information related to DSN testing is on the Telecom Switched Services Interoperability (TSSI) website at http://jitc.fhu.disa.mil/tssi. Due to the sensitivity of the information, the Information Assurance Accreditation Package (IAAP) that contains the approved configuration and deployment guide must be requested directly through government civilian or uniformed military personnel from the Unified Capabilities Certification Office (UCCO), e-mail: disa.meade.ns.list.unified-capabilities-certification-office@mail.mil.All associated data is available on the DISA UCCO website located at http://www.disa.mil/ucco/.

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6. The JITC point of contact is Mr. Dale Fulton, DSN 879-0507, commercial (520) 538-0507, FAX DSN 879-4347, or e-mail to dale.h.fulton.civ@mail.mil. JITC's mailing address is P.O. Box 12798, Fort Huachuca, AZ 85670-2798. The tracking number for the SUT is 1034101.

FOR THE COMMANDER:

Enclosure a/s   BRADLEY A. CLARK
                                         Acting Chief
                                         Battlespace Communications Portfolio

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DOT&E, Netcentric Systems and Naval Warfare
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ADDITIONAL REFERENCES

(c)   Office of the Assistant Secretary of Defense, "Department of Defense Unified Capabilities Requirements 2008, Change 1," 22 January 2010

(d)   Joint Interoperability Test Command, "Defense Switched Network Generic Switch Test Plan (GSTP), Change 2," 2 October 2006

(e)   Office of the Assistant Secretary of Defense, "Department of Defense Unified Capabilities Requirements 2008 Change 3," 11 September 2011

(f)   Joint Interoperability Test Command, Memo, JTE, "Special Interoperability Test Certification of Vidyo Video Conferencing System with Software Version 2.1.1.11_D with Codian Media Service Engine (MSE) 8321 Integrated Services Digital Network (ISDN) Gateway version 2.1(1.43)P," 1 May 2012

(g)   Joint Interoperability Test Command, "Information Assurance (IA) Assessment of Vidyo Conferencing System Release (Rel.) 2.1.1.11D (Tracking Number 1034101)," 11 April 2012

Enclosure